UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.  | FILING DATE                | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|------------------|----------------------------|----------------------|---------------------|------------------|--|
| 10/809,622       | 03/25/2004                 | Brad Bridges         | 2003P04330 US01     | 7471             |  |
| Elsa Keller      | 7590 08/26/200             | 8                    | EXAMINER            |                  |  |
| Siemens Corpor   | ration<br>perty Department | NGUYEN, KHAI N       |                     |                  |  |
| 170 Wood Ave     |                            | ART UNIT             | NIT PAPER NUMBER    |                  |  |
| Iselin, NJ 08830 | 0                          | 2614                 |                     |                  |  |
|                  |                            |                      |                     |                  |  |
|                  |                            |                      | MAIL DATE           | DELIVERY MODE    |  |
|                  |                            |                      | 08/26/2008          | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Commons  |  |  | Application No. Applicant(s)   |  |  |        |  |  |
|--|--|--|--|--|--|--------|--|--|
|  |  |  | 10/809,622   |  | BRIDGES ET AL.   |        |  |  |
| Office Action Summary  |  |  | Examiner   |  | Art Unit   |        |  |  |
|  |  | ŀ  | KHAI N. NGUYEN   |  | 2614   |        |  |  |
| Period fo  | The MAILING DATE of this commun<br>or Reply  | ication appea  | ars on the cover   | sheet with the c   | orrespondence ad   | idress |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any r  | ORTENED STATUTORY PERIOD F<br>CHEVER IS LONGER, FROM THE M<br>Issions of time may be available under the provisions<br>SIX (6) MONTHS from the mailing date of this comn<br>period for reply is specified above, the maximum st-<br>re to reply within the set or extended period for reply<br>eply received by the Office later than three months and<br>patent term adjustment. See 37 CFR 1.704(b). | IAILING DAT<br>of 37 CFR 1.136(inunication.<br>atutory period will a<br>will, by statute, ca | E OF THIS COI<br>a). In no event, howev<br>apply and will expire S<br>use the application to | MMUNICATION er, may a reply be tim IX (6) MONTHS from the become ABANDONE  | I. ely filed the mailing date of this c (35 U.S.C. § 133). |        |  |  |
| Status   |  |  |  |  |  |        |  |  |
| 1)[\   | Responsive to communication(s) file  | ad on 25 Mar   | ch 2004  |  |  |        |  |  |
| · · · · · · · · · · · · · · · · · · ·  | •  | ·  |  |  |  |        |  |  |
| 3)   | <del>/</del>   |  |  |  |  |        |  |  |
| ٥/١  | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |        |  |  |
|  | closed in accordance with the practi   | oc under Ex  | parte Quayre, 1  | 000 O.D. 11, 40  | 0.0.210.   |        |  |  |
| Dispositi  | on of Claims   |  |  |  |  |        |  |  |
| 4)🛛  | Claim(s) <u>1-3,7,9-13,17 and 18</u> is/are  | pending in t   | he application.  |  |  |        |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |  |  |        |  |  |
|  | Claim(s) is/are allowed.   |  |  |  |  |        |  |  |
| 6)🖂  | 6) Claim(s) <u>1-3, 7, 9-13, 17-18</u> is/are rejected.  |  |  |  |  |        |  |  |
| ·  | Claim(s) is/are objected to.   | ,  |  |  |  |        |  |  |
| •  | Claim(s) are subject to restrict   | ction and/or e   | election requirem  | nent.  |  |        |  |  |
| ٥,١  | and canaject to recent   |  |  |  |  |        |  |  |
| Applicati  | on Papers  |  |  |  |  |        |  |  |
| 9)☐ The specification is objected to by the Examiner.  |  |  |  |  |  |        |  |  |
| 10)  | The drawing(s) filed on is/are:  | : а)∏ ассер  | ted or b)⊡ obje  | cted to by the E   | Examiner.  |        |  |  |
|  | Applicant may not request that any obje  | ction to the dra   | awing(s) be held i   | n abeyance. See  | 37 CFR 1.85(a).  |        |  |  |
|  | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |  |  |  |        |  |  |
| 11)  | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |  |  |  |        |  |  |
| Priority ι   | ınder 35 U.S.C. § 119  |  |  |  |  |        |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |  |  |  |  |  |        |  |  |
| 2)  Notic 3) Inform  | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date   | PTO-948)   | 5) <u> </u>  | nterview Summary<br>Paper No(s)/Mail Da<br>Notice of Informal Pa<br>Other: | te   |        |  |  |

Art Unit: 2614

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 13, 2008 has been entered.

## Response to Amendment

2. Applicant's amendment filed on May 13, 2008 has been entered. Claims 1-2, 7, 9, 11-13 and 21 have been emended. Claims 4-6, 8, and 14-16 have been canceled. No claims have been added. Claims 1-3, 7, 9-10, 11-13, and 17-18 are still pending in this application, with claims 1, and 11 being independent.

# Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 10, **11**, 13, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2614

Claims 10 and 18 recite an <u>acronym GR303</u> that needs to be spelled out in the claim when it first appears to avoid any possible confusion now and in the future for acronym may refer to different item or object. Appropriate correction is required.

Claims 11 and 13 are rejected under 35 U.S.C. § 112, second paragraph as being vague and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 is drawn toward an "apparatus", but the features in this claim appear to be applied for a method claim (i.e., "An <u>apparatus - - - comprising the steps of: providing at least one service - - -; in response to - - -, downloading data - - -; when a loss of communication - - -, performing call services - - - "), and there is no structure features related to an apparatus in this claim. Claim 13 recites "The apparatus of claim 11, wherein <u>the step of downloading data includes downloading call services</u> to support a minimum quality of services", again no structure features in this claim. Therefore, it cannot be concluded with a complete assurance that claims 11 and 13 are the method or the apparatus claims. Appropriate correction is required.</u>

## Claim Rejections - 35 USC § 103

- 5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 6. Claims 1-3, 7, 9-10, 11-13, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorshe et al. (U.S. Patent Number 5,355,362 hereinafter

"Gorshe") in view of Biegel et al. (U.S. Patent Number 5,608,720 hereinafter "Biegel"), in view of Chow et al. (U.S. Publication 2002/0058495 A1 hereinafter "Chow"), and further in view of Ardon (U.S. Patent Number 5,850,434).

Regarding claims 1 and 11, Gorshe teaches a method and an apparatus for providing a remote (Fig. 1, REMOTE DIGITAL TERMINAL (RDT)) with a stand alone capability to connect calls independently (Fig. 1, SUBSCRIBER 1-N, RDT, column 4 lines 63-68, i.e., in several applications, the data is processed by the RDT, these applications include the digital loop carrier RDT (DLC RDT) acts as a TR-008 central office terminal (COT) "stand-alone" and reformats the data for the connection to the central office), wherein the remote normally connects through a host (Fig. 1, CENTRAL OFFICE TERMINAL (COT)) that provides call connectivity to a remote user (Fig. 1, Fig. 5, COMMON MODULE 20, Fig.9, REMOTE SWITCH UNIT 27 (RSU), col. 8 lines 29-32, i.e., stand-alone switching operation of an RDT in the event of a failure of the communication link between the host and the RDT), comprising the steps of: providing at least one service that effects the stand alone capability regards to Subscriber Data by the remote for call connectivity (Figs. 1-4, column 2 lines 4-17, Fig. 5, 22 CCS GLOB. & EOC (Common Channel Signaling Global & Embedded Operation Channel unit), col. 6 lines 29-36, i.e., performs layer 2 (LAPD - Link Access Protocol for Data channel) and layer 3 (routing) processing, and lines 51-56, i.e., message processing is performed by the service definition module and the low speed interface unit "Subscriber Data"); and when a loss of communication between the remote and the host is detected, performing

Art Unit: 2614

call services with the remote in the stand alone mode (Figs. 6(a)-6(d), Central Office (CO) to RDT, column 4 lines 63-68, and column 8 lines 28-32, i.e., emergency standalone switching operation of an RDT, and capable of providing telephone connections between any of the subscribers subtending from that RDT) with the data stored in the database local to the remote (Figs. 1-5, column 5 line 67 through column 6 line 17, i.e., common control and interface (CC&I) unit of the DLC RDT has a system database and a redundant copy of the database is stored within a redundant CC&I).

However, Gorshe does not specifically disclose the administration notification service, and in response to the notification downloading data including line data, centrex group data, and multi line hunt group data from the host to the remote and storing the line data, centrex group data, and multi line hunt group data in a database local to the remote. Although, Gorshe teaches the LAPD protocol to process common channel signaling (CCS), time slot management (TMC) messages and communicate provisioning functions to the service definition module or the low-speed interface units "Subscriber Data" (Gorshe - Fig.5, col. 6 lines 29-68, and col. 7 lines 1-4), downloading software, firmware and stored subscribers data in a database local to the remote (Figs. 1-5, column 5 line 67 through column 6 line 25, i.e., common control and interface (CC&I) unit of the DLC RDT has a system database and a redundant copy of the database is stored within a redundant CC&I, and data, software, and firmware are downloaded through a port in the CC&I).

In the same field of endeavor, Biegel teaches an integrated digital loop carrier (IDLC) and the RDT (Biegel - Fig. 1) which operate with a control system comprising

software subsystems in accordance to the Open System Interconnect protocol (i.e., layer 2 LAPD, layer 3 TR-303) (Biegel – Fig. 1, Fig. 2B, col. 1 lines 21-31, col. 10 lines 8-12, and lines 49-53), and the Administrative Subsystem provides an administration change notification (Fig. 4, 418, Fig. 34 Administrative Subsystem Software Hierarchy, col. 38 lines 14-22, lines 64-67, and col. 39 lines 1-8). The advantage of Biegel is the system/subsystem software being implemented according to the standard OSI architecture, therefore, will save costs to replace existing equipment to achieve a standard interface (Biegel - col. 2 lines 31-38), Chow teaches a system with a local subscriber switch (LDS) connected to a RDT via a GR 303 trunk (Chow - Fig. 1, LDS, RDT, GR 303, paragraph [0048] lines 13-20), and the steps for downloading subscribers data necessary for local service when received a download request message (Chow - Fig. 3, step b Download Request, Download Response, paragraph [0086] lines 1-9), and Ardon teaches the process of multi-line hunt group (Ardon – Fig. 9, col. 12 lines 3-20), and Centrex data (Ardon – Fig. 14, 1110, col. 14 lines 65-67, and col. 15 lines 1-4, lines 52-65). The advantage of Ardon's invention is a subscriber station can be seen as if it were connected to a network even if it is connected to a switch "Remote Digital Terminal" (Ardon – col. 3 lines 40-45).

It would have been obvious to a person of ordinary in the art at the time of the invention was made to apply a known technique to a known device (i.e., using the administrative change notification, downloading data for local service, and data includes multi-line hunt group and Centrex data for a stand-alone RDT operation) ready for improvement to yield predictable results (see KSR – MPEP 2143). Therefore, it would

Art Unit: 2614

have been obvious to a person of ordinary in the art to incorporate the use of administrative change notification, downloading data for local service, and data includes multi-line hunt group and Centrex data, as taught by Biegel, Chow, and Ardon, into the method and system of Gorshe in order to enhance the stand-alone operation of a RDT.

Regarding claims 2-3 and 12-13, Gorshe teaches an apparatus and a method, wherein the line data is needed for connecting calls and call services to support a minimum quality of service (see Gorshe - Figs. 1-5, CC&I, column 5 lines 24-30, i.e., process data packets from channel unit (e.g., off-hook, ringing), mapping or address translation to physical connections of subscribers). Chow teaches the step of downloading data includes downloading call services (see Chow - Fig. 3, step b Download Request, Download Response, paragraph [0086] lines 1-9).

It would have been obvious to a person of ordinary in the art at the time of the invention was made to apply a known technique to a known device (i.e., using downloading call services for a stand-alone RDT operation) ready for improvement to yield predictable results (see KSR – MPEP 2143). Therefore, it would have been obvious to a person of ordinary in the art to incorporate the use of downloading call services, as taught by Chow, into the method and system of Gorshe in order to enhance the stand-alone operation of a RDT.

Regarding claim 7, Gorshe teaches a method wherein the service is a download service (see Gorshe - Figs. 1-3, column 3 lines 53-59, i.e., multi-megabit data service

Page 8

(SMDS) or frame relay packets, wideband services transported through a RDT "a download service").

Regarding claims 9 and 17, Gorshe teaches an apparatus and a method, wherein the service is a Database Synchronization and Status Service that provides a mechanism to ensure that administration changes to subscriber data are properly reported to the remote (col. 6 lines 3-6, and lines 10-14).

However, Gorshe does not specifically disclose the database synchronization.

Biegel teaches the databases automatically synchronized all changes for the databases (Biegel – Database Management, col. 20 lines 8-20). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the database synchronization, as taught by Biegel, into Gorshe's method and apparatus in order to enhance the stand-alone operation of a RDT.

Regarding claims 10 and 18, Gorshe teaches an apparatus and a method, wherein the remote is a remote digital terminal (RDT) that operates in compliance with the GR303 standard (col. 2 line 68, col. 3 lines 1-4, and col. 4 lines 67-68, i.e., Bellcore TR-TSY-000303 (TR-303 - Technical Requirements TR-303 now turned into Generic Requirements GR-303)).

Art Unit: 2614

## Response to Arguments

7. Applicant's arguments with respect to claims 1 and 11 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carter et al. (U.S. Pub. No. U.S. 2001/0040899 A1) teach a method and a system to provide managing bandwidth in a digital loop carrier system.

Ng. et al. (U.S. Patent 6,131,096) teach a system and a method for updating a remote database.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI N. NGUYEN whose telephone number is (571)270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. N. N./ Examiner, Art Unit 2614

/Ahmad F MATAR/

08/23/2008

Supervisory Patent Examiner, Art Unit 2614